

REMARKS

The specification has been reviewed, and clerical errors of the specification have been corrected.

In paragraph 3 of the Action, claims 4 and 5 were rejected under U.S.C. 112, first and second paragraphs. In paragraph 5 of the Action, claims 1-4 and 6 were rejected under U.S.C. 102(b) as being anticipated by Kurosaki (US No. 5,292,158).

In view of the rejections, claims 1 and 4 have been amended to clarify the features of the invention. Also, new claim 7 has been filed.

As recited in claim 1, a latch device of the invention engages and releases a striker by push-and-push operations. The latch device includes a case having an upper opening for receiving the striker therein; a latch member disposed inside the case and being able to be switched between an engagement position where the striker is prevented from being removed and a release position where the striker can be removed; a spring member disposed in the case for urging the latch member to move to the release position; two sets of generally heart-shaped cam grooves with same shapes having generally flat bottom faces; and a pin member having a general U-shape and including a U-shape intermediate portion disposed on a side opposite to the opening of the case, and U-shape side portions with edges projecting toward each other to engage and trace the two sets of the cam grooves in a same manner simultaneously. The two sets of the cam grooves are provided on two sides of the latch member symmetrically relative to a center plane between the two sides of the latch member. The pin member is disposed inside the case to be able to swing at the intermediate portion.

In the latch device recited in claim 1, the two sets of the generally heart-shaped cam grooves have the same shapes with the generally flat bottom faces. Further, the two sets of the cam grooves are provided on the two sides of the latch member symmetrically relative to a center plane between the two sides of the latch member. Accordingly, when the edges of the U-shape side portions of the pin member engage the two sets of the cam grooves,

the edges can trace the two sets of the cam grooves in a same manner simultaneously. As a result, the pin member is not deformed due to an unbalanced force, and the latch device moves smoothly without generating excessive noise.

Kurosaki discloses a lock mechanism and latch device. The lock mechanism allows an openable member to engage with and disengage from a main body when the openable member is pushed, or through the push-and-push operation. The latch device retains a latch body in a housing in a pushed-in state, or the engagement position, and a withdrawn state, or the release position. As shown in Figs. 15 and 17 in Kurosaki, the lock mechanism of the latch device includes a tracing member 214 and a pair of circulatory cam grooves 30 and 148 respectively formed on both sides of a circulatory-cam-groove fitting member 218. The tracing member 214 has tracing portions 224 and 226 to be fitted in the circulatory cam grooves 30 and 148. The circulatory cam grooves 30 and 148 are respectively formed in the upper and lower surfaces of the circulatory-cam-groove fitting member 218, and are provided with mutually different configurations.

As most clearly shown in Fig. 17 in Kurosaki, the circulatory cam groove 30 is shown by the solid lines, and has a configuration in which an upwardly projecting heart-shaped cam 232 is left uncut in a substantially central portion of the upper portion of the circulatory-cam-groove fitting member 218. On the other hand, the circulatory cam groove 148 is shown by the broken lines, and has a configuration different from that of the circulatory cam groove 30. Accordingly, when the tracing portions 224 and 226 are inserted and moved in the circulatory cam grooves 30 and 148, respectively, the tracing portions 224 and 226 do not trace the circulatory cam grooves 30 and 148 in a same manner simultaneously. In Kurosaki, since the tracing portions 224 and 226 do not move in a same manner, it is possible to generate an unbalanced force in the tracing member 214, thereby deforming the tracing member 214 unevenly. As a result, the latch device may be difficult to move smoothly or generate noise.

In claim 1 of the invention, the two sets of cam grooves having the same shapes are provided on the two sides of the latch member. When the edges of the pin member move in the cam grooves,

the edges trace the cam grooves in a same manner simultaneously. As a result, the pin member is not deformed due to an unbalanced force, and the latch device moves smoothly and quietly. In Kurosaki, two different cam grooves 30, 148 are formed on two opposite sides of the fitting member 218. Kurosaki does not disclose or suggest the features of claim 1 of the invention.

In new claim 7, it is clarified that the latch member includes a sliding member having a side opening and being able to slide inside the case to switch between the release position and the engagement position, and a latch claw pivotally situated inside the sliding member, and that the latch claw projects from the side opening inside the case to engage the striker at the engagement position and is generally located inside the sliding member in the release position. In Kurosaki, arms 36 attached to a latch body 10 holds a striker 34. Namely, the arms 36 in Kurosaki are not used in the invention. The latch member of the invention is entirely different from the latch body 10 of Kurosaki.

As described above, the cited reference does not disclose nor suggest all the features in claims 1 and 7 of the present invention.

Reconsideration and allowance are earnestly solicited.

Respectfully submitted,

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